REMARKS

Claims 1-25 are pending in the instant application. Claims 1-25 are subject to restriction and an election requirement.

Response to Election/Restriction Requirement

The Examiner has required restriction to one of six exemplary groups, four of which created groups of compounds, one directed to a method of inhibiting cathepsin activity, and one directed to a method of treating disease states related to cathepsin functioning. The Examiner stated that the groups of compounds listed were **exemplary**, and that "applicant may choose to elect a single invention...by identifying another specific embodiment **of similar scope not listed in the exemplary groups** of the invention and examiner will endeavor to group the same." Applicants would like to suggest Group A:

> A. Parts of Claims 1-15, 22 and 25 drawn to compounds, pharmaceutical compositions and a process for making a pharmaceutical composition wherein X is O; D is aryl, heteroaryl, C_{3-8} cycloalkyl or heterocycloalkyl; R^7 is hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl, aryl or heteroaryl; R^8 is hydrogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{1-6} haloalkyl; n is 2; and all other variables are as defined.

Group A is similar in scope to the four compound groups exemplified by the Examiner; Applicants anticipate that this group will be acceptable. Assuming that it is, Applicants hereby elect to prosecute the invention of Group A with traverse.

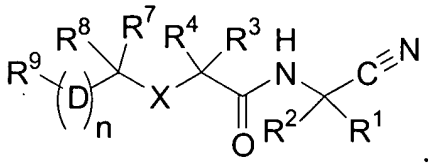
For the following reasons, Applicants respectfully request that the restriction requirement is in error and be withdrawn for the reasons discussed below.

The Examiner alleges that the claims do not relate to a single general inventive concept under PCT Rules 13.1 and 13.2 because they lack the same or corresponding special technical features. The Examiner identifies a structural moiety common to the compounds of the instant invention and alleges that it is not a special technical feature because it fails to define a

contribution over the prior art. The Examiner further states that "the variables vary extensively and when taken as a whole, result in vastly different compounds."

Applicants disagree with the Examiner's assertion that the "variables vary extensively." Although there are multiple substituents provided for each of the R, D and X groups, the substituents were chosen in such a way as to produce cathepsin K inhibitors. This objective necessarily limits the variables possible for inclusion in each of the definitions.

Applicants also disagree with the Examiner's allegations that, when taken as a whole, the variables "result in vastly different compounds." Applicants respectfully reject the Examiner's arguments because the compounds of the instant invention are all defined by the following generic structure:



This common backbone provides compounds that are structurally related and useful for the inhibition of cathepsins. The generic schemes and seventy-four examples described in the specification provide adequate proof that the compounds of the instant invention are indeed structurally related to one another, and not "vastly different" as alleged by the Examiner. Additionally, the assays provide a means to determine ability of these related compounds to inhibit cathepsins.

Furthermore, there are two criteria for a proper restriction requirement between patentably distinct inventions: (1) the inventions must be independent or distinct as claimed; and (2) there must be a serious burden on the Examiner if restriction is not required. MPEP § 803. Applicants urge that there is no serious burden in combining the restricted groups into one application.

The Examiner alleges that the instant application contains inventions "which are not so linked as to form a single general inventive concept under PCT Rule 13.1." Applicants disagree with the Examiner's assertion in that the compounds are peptide nitriles with a common backbone. The pharmaceutical composition, process and method of treatment claims all relate to this class of compounds. Thus, these "groups" would have not acquired a separate status in the

art because they are all related to compounds with a common backbone. Accordingly, Applicants insist that the Examiner would not be saddled with the burden of conducting multiple searches. Without such a burden, the requirements expressed in MPEP § 803 have not been satisfied, and restriction is improper.

In view of the above statements supporting lack of a serious burden on Examiner if restriction is not required, Applicants respectfully request that the requirement for restriction be withdrawn.

If a telephonic communication with the Applicants' representative will advance the prosecution of the instant application, please telephone the representative indicated below. Applicants believe no additional fees are due but the Commissioner is authorized to charge any fees required in connection with this response to Merck Deposit Account No. 13-2755.

Respectfully submitted,

By 

Nicole M. Beeler
Reg. No. 45,194
Attorney for Applicants

MERCK & CO., INC.
P.O. Box 2000
Rahway, New Jersey 07065-0907
(732) 594-1077

Date: January 09, 2007